

operating manual *and*

parts list

MODEL 2450-0
20-INCH
ROTARY MOWER



YARD-MAN

1410 West Ganson Street — Jackson, Michigan 49202

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RULES FOR SAFE OPERATION

Your rotary mower is a precision piece of power equipment. Engineering skill and experience have been combined to provide the ultimate in safety and efficiency, however, as with any type of power equipment, carelessness or error on the part of the operator can result in injury. Exercise extreme caution at all times.

1. **KNOW YOUR MACHINE** Read the Owner's Manual carefully - learn how to operate your mower properly.
2. **MAKE SURE THE LAWN IS CLEAR** of sticks, stones, wire and other hazardous items from lawn before mowing. Such items are dangerous to both the mower and individuals in the vicinity of the mower.
3. **ADD FUEL** before starting engine - - - never when engine is hot or running.
4. **ALWAYS STOP ENGINE** (turn off switch or disconnect sparkplug wire) before attempting any repairs or adjustments.
5. **START ENGINE CAREFULLY** Always stand at side opposite discharge chute. **NEVER PLACE HANDS OR FEET UNDER THE MOWER OR NEAR THE DISCHARGE CHUTE WHILE THE ENGINE IS RUNNING.**
6. **DO NOT TILT MOWER** at extreme angle while engine is running. Cut grass on hills and banks sideways.
7. **STOP THE ENGINE** when not cutting grass.
8. **DO NOT ALLOW MINORS** to operate mower unless thoroughly instructed and properly supervised.
9. **KEEP CHILDREN AND PETS AWAY** from area at all times during mowing operation.
10. **ALWAYS CHECK FOR DAMAGE** If you should strike some foreign object while mowing, stop your mower. Inspect for and repair any damage before restarting and operating the mower.

LAWN CARE

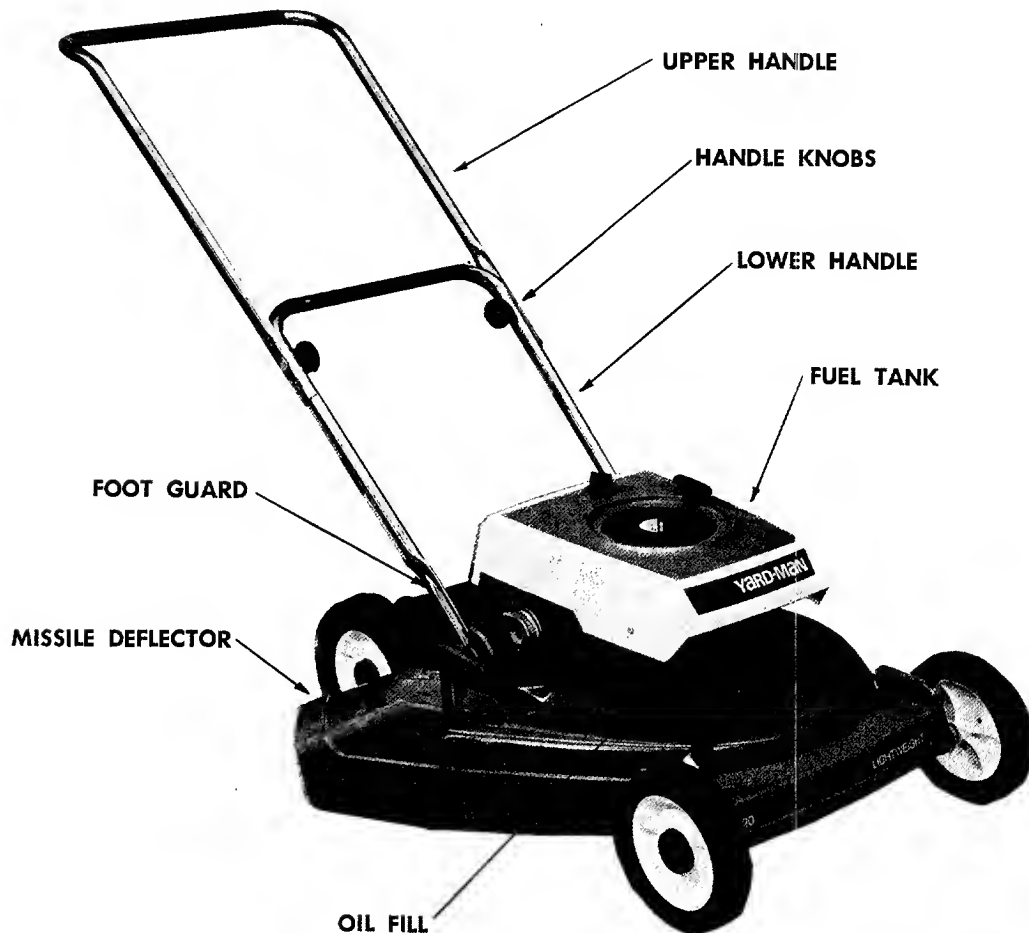
1. It is not advisable to cut off more than 1/3 of the total length of the grass at any one mowing.
2. When mowing thick, lush wet grass, start at outside of lawn and mow in counter-clockwise direction to prevent mower from recutting clippings from previous rounds.
3. When mowing thin or dry grass, start at outside of lawn and mow in clockwise direction to progressively discharge clippings to center of lawn where they can easily be removed.
4. Recommended normal cutting heights for different types of grass:

1½ to 2½ — Med. to Med. High	Marion blue grass	1 to 1½ — Low to Med. Low.	Bermuda
1½ to 2½ — Med. to Med. High	Kentucky blue grass	1 to 1½ — Low to Med. Low.	Zoysia
1 to 2 — Med. - Low to Med.	Fescues	1 to 2 — Med. - Low to Med.	Bent grass
1 to 2 — Med. - Low to Med.	Rye grass		

USING GRASS CATCHER

1. When using grass catcher, operate mower engine at ¾ to full throttle.
2. In heavy dense turf, set cutting height in medium to high position and mow in a counter-clockwise direction so the catcher will not drag in the uncut portion.
3. Allow wet grass to dry before attempting to mow with grass catcher attached.
4. Empty catcher bag thoroughly before storage.

PREPARING YOUR YARD-MAN MOWER FOR USE



SET UP

Your mower is shipped in one carton completely assembled with the handle assembly, foot guard deflector and missile deflector in the shipping or storage position. To remove your mower from the carton, slit the end of the carton and roll the mower out. Prepare your mower for use with the following steps:

Step 1: Move the foot guard and missile deflector down to operating position.

Step 2: To place handle in operating position, make sure the handle knobs are loose enough to allow the upper section to pivot freely around the mounting bolts. Lift the handle assembly until the lower section snaps into the operating position, as shown. The upper section can now be moved into place. Tighten the handle mounting knobs.

Note: Make sure the handle knobs are loose enough to allow the upper section to pivot freely around the mounting bolts.

BEFORE STARTING ENGINE

Remove oil fill plug and fill the crankcase to overflowing with S.A.E. No. 30 oil. (1¼ pints approx.)

Fill fuel tank with a good grade regular clean, fresh gasoline. **DO NOT MIX OIL WITH GASOLINE.** FOR COMPLETE ENGINE INFORMATION, READ ENGINE INSTRUCTION BOOKLET BEFORE STARTING ENGINE.

TO START ENGINE

1. Place throttle control knob in "Heavy Cutting" (Fast).
2. While standing at the left side of the mower, opposite the discharge chute, pull the starter rope with a quick full stroke. Repeat if necessary.
3. When engine starts, move throttle control knob to "(Normal Cutting" slow speed until engine warms up.

NOTE: If engine floods, place throttle control knob in "Stop" position. Pull starter rope at least 4 times. This will clear the engine of excess gas. Then reposition control knob to normal cutting position and follow the suggested starting procedure.

Engine flooding is usually caused by a dirty air cleaner. **Service air cleaner regularly as noted in engine instruction manual.**

If engine continues to flood even with a clean air filter, lean carburetor adjustment screw $\frac{1}{8}$ turn.
(See engine instructions)

TO ADJUST HEIGHT OF CUT

The cutting height of your mower can easily be adjusted from low to high cut. Place your hand on the outside of the wheel, spring the adjusting lever, with your thumb, outward until the locating trunnion on the lever is free from the housing. Move the wheel and lever to the height of cut desired. Release the lever, allowing the trunnion to drop into the proper locating hole.

CAUTION: Do not make adjustments with the engine running.

TO CHANGE OIL

Engine oil should be changed after the first 5 hours of operation and each 25 hours of operation thereafter.

Drain oil while engine is warm. Disconnect spark plug wire and secure at least 1" away from spark plug. Block right hand side of mower up about 4" high and set shallow one quart container beneath oil drain. Remove oil drain plug from sump and allow oil to drain completely. Replace plug and refill with S.A.E. #30 oil. (1 $\frac{1}{4}$ pints approx.)

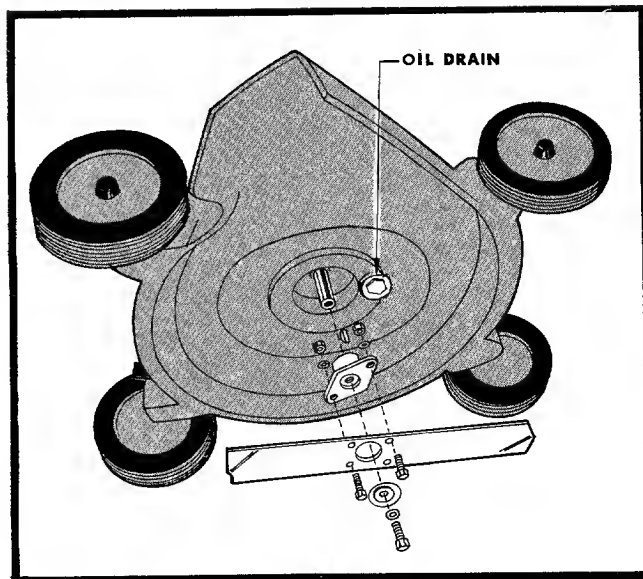
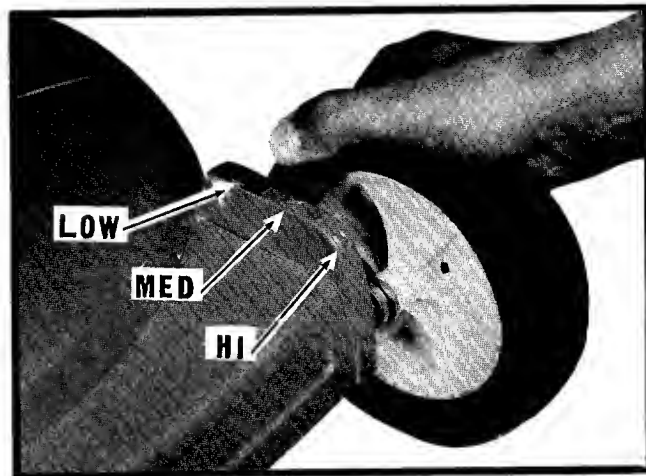
BREAK-IN PERIOD

During the first ten hours of operation, check the following items frequently:

- Oil Level
- All nuts, bolts and screws for tightness
- Condition of Blade

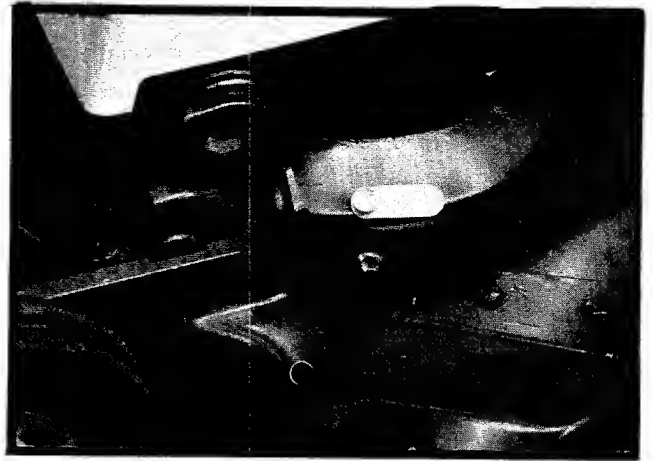
TO REPLACE BLADE

1. Be sure engine is stopped, disconnect spark plug wire and secure at least 1" away from spark plug.
2. Tip mower on the side and remove the blade and adaptor from engine crank.
3. Remove the blade from the adaptor and replace with a new blade. Reassemble to engine.
4. Resharpening of an old blade should only be attempted by a qualified service center. This way proper blade balance will be maintained.



TO USE WASH OUT PORT

After mowing, remove wash out port plug, place hose end (without nozzle) into opening. Using moderate water pressure, run engine at full throttle speed for about two minutes. This flushes out accumulations of grass clippings from underneath mower housing. DO NOT wash the top. It may be necessary to tilt the mower back on the rear wheels after washing to drain any water which may have accumulated on the top of the housing.



ENGINE SHROUD

The engine shroud on your mower is hinged for easy accessibility of the carburetor and air cleaner for service. To pivot the shroud the following steps must be followed.

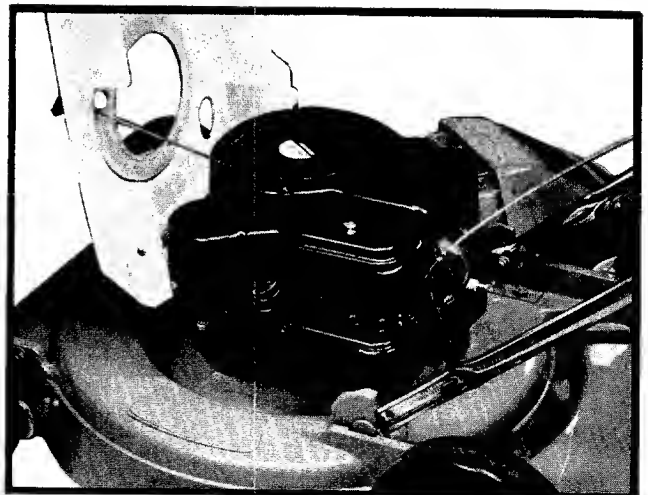
1. Disconnect sparkplug wire and secure at least 1 inch away from sparkplug.
2. Move throttle lever to "Stop" position.
3. Wipe all dirt and debris from around the oil fill cap and remove dipstick.
4. Slowly pull recoil starter rope out far enough to allow the shroud to pivot to an upright position then release rope carefully.



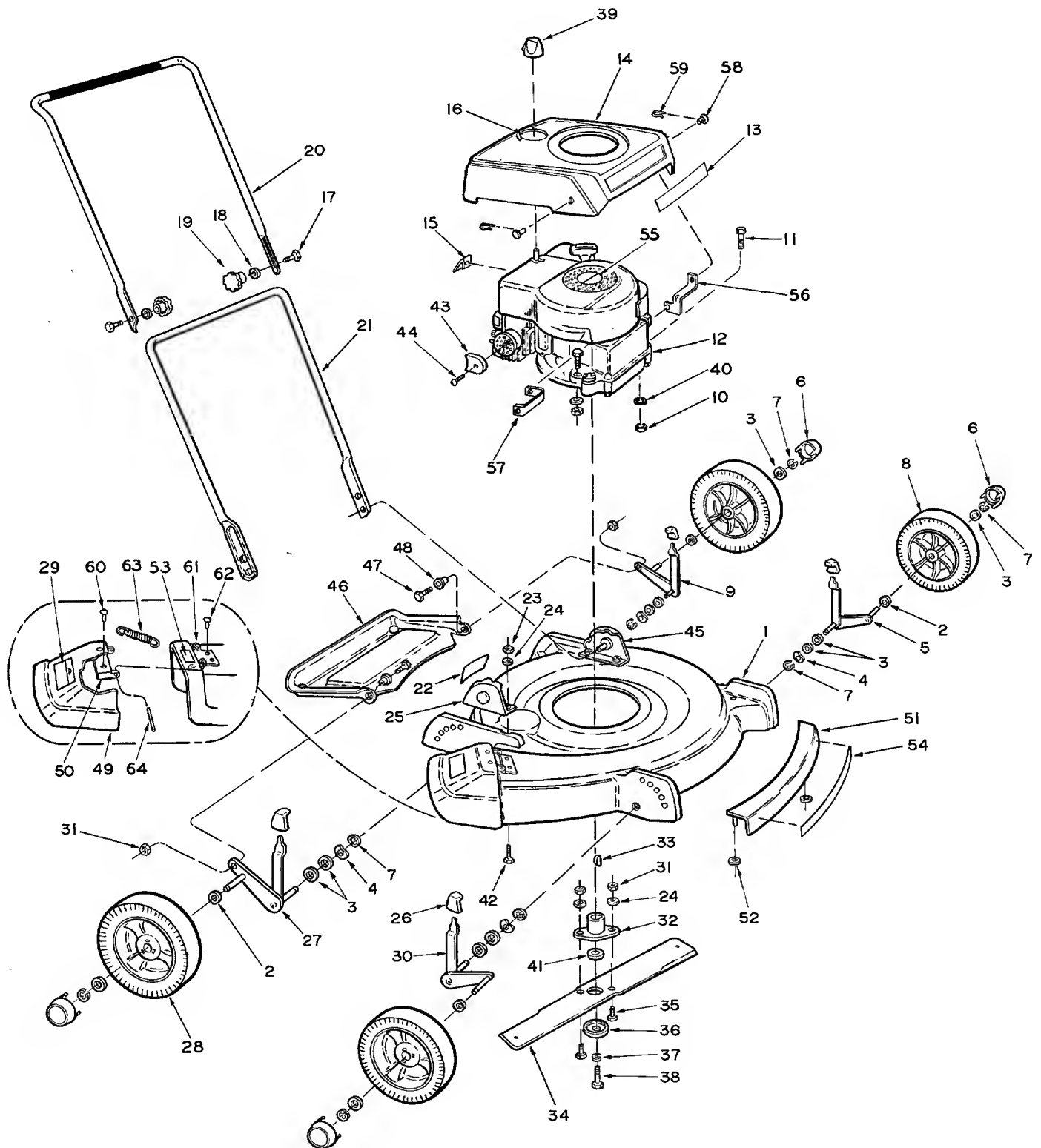
AIR CLEANER

Poor engine performance is usually caused by a dirty air cleaner and indicates service is necessary. Clean and re-oil the air cleaner after every twenty-five hours of normal operation as follows:

1. Remove the screw and carefully remove air cleaner to prevent dirt from entering the carburetor.
2. Clean the foam element as recommended in your engine manual.
3. After cleaning and re-oiling, reassemble and fasten securely to carburetor with screw.



MODEL 2450-0



ALL UN-NUMBERED
PARTS INTER-CHANGEABLE
WITH OPPOSITE SIDE

PARTS LIST

MODEL 2450-0

When ordering parts listed as L.H. or R.H.—determine the left or right hand side of your mower by standing behind the unit as you mow.

REF. NO.	PART NO.	NAME OF PART	REF. NO.	PART NO.	NAME OF PART
1	5601-196	Blade Housing	32	1143-5	Ass'y - Blade Adaptor
2	1540-86	Washer (½ x 1.0 x ⅛)	33	1646-8	Key (#6 Woodruff)
3	1540-90	*Washer (½ x 1.0 x .030)	34	3604-39	Blade - Grass
4	1552-2	*Washer - Wave	35	1509-34	*Bolt (¼-20 x ¾ Hex Hd.)
5	2123-31	Ass'y - Front Axle L.H.	36	1543-39	Washer -Special
6	2674-39	Hub Cap	37	1542-8	*Lockwasher (⅜ Split)
7	1650-1	Retaining Ring	38	1509-101	*Bolt (⅜-24 x 1½ Hex Hd. Lock)
8	2108-230	Ass'y - Wheel & Tire (7 x 1.75)	39	2643-44	Knob - Throttle Control
9	2123-35	Ass'y - Rear Axle (L. H.)	40	41-046	Washer (11/32 x ⅞ x 3/32)
10	1538-6	*Nut - Lock (5/16 - 18 Hex)	41	1624-135	Washer (⅜ x 1.0 x .210)
11	1509-75	*Bolt (5/16 - 18 x 1½ Hex Hd.)	42	1529-15	Bolt (¼-20 x ⅝ Carriage)
12		*Ass'y - Engine Briggs & Stratton Model 90908 Type 1369-01	43	1556-22	Deflector
13	2616-564	Label - Engine Shroud	44	1511-34	Screw (#8-32 x ½ Rd. Hd.)
14	4699-119	Shroud - Engine	45	2132-87	Ass'y Bracket & Pin (L.H.)
15	1689-38	Clip	46	4556-26	Deflector - Rear Foot Guard
16	1616-624	Label - Dial Control	47	1509-35	Bolt (¼-20 x ⅝ Hex Hd.)
17	1513-103	Bolt (5/16-18 x 1¾ Special)	48	1657-75	Bushing - Deflector Retaining
18	1025	Washer (5/16 Split Lock)	49	4556-36	Deflector - Missile
19	1643-47	Knob	50	1708-12	Hinge - Deflector Half
20	2117-103	Ass'y - Upper Handle	51	3699-105	Shroud - Blade Housing (Front)
21	3712-132	Handle Lower	52	1539-20	Nut - Shroud Retaining
22	1605-649	Model Number Plate	53	1616-658	Label - Catcher & Guard
23	1538-19	*Nut (¼-20 Hex Lock)	54	2616-556	Label - Front Shroud
24	1018	*Washer - Lock (¼ Split)	55	1616-564	Label - Starter Housing
25	2132-116	Ass'y - Bracket & Pin (R.H.)	56	1609-603	Bracket - Pivot (L.H.)
26	2643-43	Knob - Adjust Lever	57	1609-604	Bracket - Pivot (R.H.)
27	2123-36	Ass'y - Rear Axle (R.H.)	58	1545-25	Pin - Clevis (3/16 x ⅜)
28	2108-226	Ass'y - Wheel & Tire (8 x 1.75)	59	1547-4	Hairpin -Cotter
29	1616-661	Label - Caution O.P.E.I.	60	1530-1	Rivet (3/16)
30	2123-30	Ass'y - Front Axle (R.H.)	61	2708-11	Hinge - Housing Half
31	1538-8	*Nut (¼-20 Hex Hd. Lock)	62	1533-20	Rivet (¼ Pop)
			63	1642-143	Spring
			64	1548-31	Rollpin (3/16 x 4¼)

*Standard Hardware Item—May Be Purchased Locally

SUGGESTIONS FOR MORE EFFICIENT, AND MAINTENANCE-FREE OPERATION

GENERAL MOWING

1. Always keep mower blade "Knife" sharp and balanced for maximum cutting efficiency.
2. Always start engine with mower on level surface where blade will not drag on tall grass or other obstructions. After starting, let engine warm up several minutes at slow speed before starting to mow.
3. When mowing under normal conditions, run mower at $\frac{1}{2}$ to $\frac{3}{4}$ throttle for best results.
4. When cutting tall heavy growth, or on rough ground, place mower in highest cut position and gradually reduce to desired cutting height over course of two or three mowings.
5. When cutting tall heavy lush grass the clippings may have a tendency to stick to the underside of the housing. Always keep underside of housing clean.

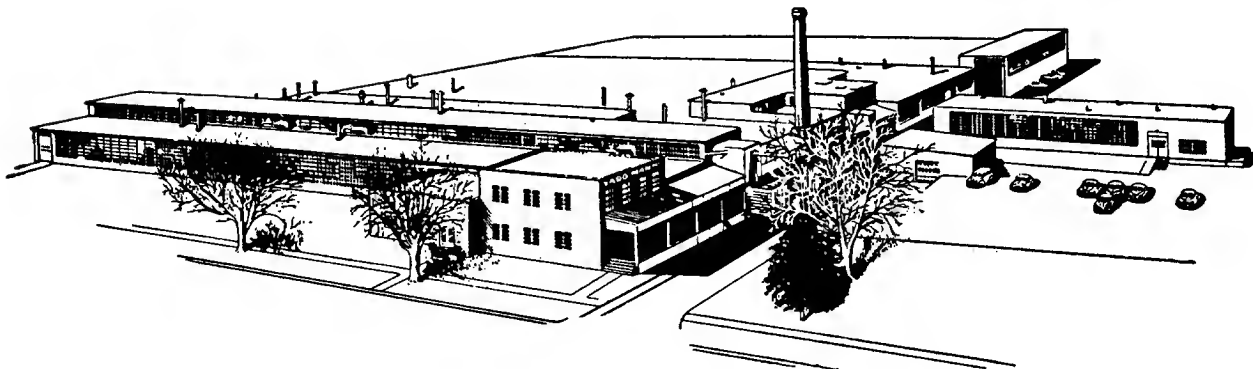
MAINTENANCE

Your mower like all machines with moving parts must receive care and maintenance. The following tips, if used, will contribute many trouble-free hours to your mower.

1. Check oil level frequently. When changing oil, make sure dirt and debris is cleaned off oil sump before removing oil plug.
2. Keep mower clean, especially the engine and underside of mower housing.
3. Check all nuts, bolts and screws occasionally to be sure mower is in good operating condition.
4. Should excessive vibration develop, check your blade and crankshaft immediately. Do not operate mower with an unbalanced blade, a damaged blade or a damaged crankshaft.
5. The wheel bearings are pre-lubricated at the factory and should require no further attention until mower is serviced. However, it is advisable to remove the wheels and apply a small amount of light oil to each axle, at least once a season.
6. If you are going to store your mower for any length of time (30 days or longer) it is important that the following steps be taken:
 - a. Drain the gas tank. Start the engine and allow it to run out of gas. Gasoline left in the engine will leave gum deposits in the carburetor and gas tank.
 - b. Clean engine of all foreign matter.
 - c. Lubricate cylinder by removing the spark plug and pouring one ounce of clean lubricating oil through the spark plug hole into the cylinder. Crank engine slowly to spread oil and replace spark plug. To start after storage remove spark plug and rotate engine with starter to remove excess oil.
7. Just as your automobile needs professional mechanical maintenance from time to time, so does your air cooled engine. A yearly tune-up and check by a qualified service center is recommended to avoid breakdowns and unnecessary delays during the cutting season.

Service Record

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WARRANTY

We guarantee all parts against defects in material and workmanship for a period of one (1) year from the date of purchase when used for residential. 90 days for commercial.

We agree to repair or replace without charge to the original Purchaser, including labor, any part or parts upon examination by a Yard-Man Authorized Dealer to be defective within the guarantee period except the engine which is warranted separately by the manufacturer. All transportation charges for replacement under this guarantee must be paid by the Purchaser.

This guarantee will not apply to a unit which has been subjected to misuse, negligence, accident or to a unit which has been altered in any way.

YARD-MAN

Yard-Man reserves the right to make engineering changes without prior notification or responsibility to the Purchaser.